

Systematics of an isolated population of tooth-carp from northern Iran (Actinopterygii: Cyprinodontidae)

by Brian W. Coad and Asghar Abdoli

Abstract: The most northerly and easterly population of tooth-carps in Iran is described. This isolated population in the Damghan basin of the Alborz Mountains is unique in colour pattern of females but other characters show overlap with populations 560–700 km to the south. Its specific distinction cannot be affirmed on current data but the population is open to human impacts and should be conserved until further studies can be carried out.

Kurzfassung: Die nördlichste und östlichste Population von Zahnkäpflingen im Iran wird beschrieben. Die Weibchen dieser isolierten Population im Damghan-Becken im Elburzgebirge sind in bezug auf das Färbungsmuster gegenüber anderen Zahnkäpflingen eindeutig gekennzeichnet, doch überlappen sich andere Eigenschaften mit jenen von Populationen, die 560–700 km weiter südlich liegen. Die vorliegenden Daten lassen die Zuweisung eines Artstatus nicht zu. Da die Population menschlichen Einflüssen ausgesetzt ist, sollte die Population geschützt werden, bis weitere Untersuchungsergebnisse vorliegen.

Key words: Cyprinodontidae, *Aphanius*, Iran, Middle East, systematics.

Introduction

The Cyprinodontidae are represented in Iran by six named species (SCHEEL 1990, WILDEKAMP 1993, COAD 1980, 1987, 1988, 1995, 1996). These are *Aphanius ginaonis* (Holly, 1929) restricted to a hot spring near Bandar Abbas at the Straits of Hormuz, *A. mento* (Heckel, 1843) which is reputedly found in the Tigris River basin, *A. dispar* (Rüppell, 1829) found in all the coastal drainages of the Persian Gulf and Sea of Oman and in inland basins of Baluchestan, *A. vladaykovi* Coad, 1988 from the Zagros Mountains west of Esfahan in the Tigris River basin, *A. sophiae* (Heckel, 1849) from the endorheic Kor River basin in Fars Province of southern Iran, and *A. persicus* (Jenkins, 1910) from the nearby endorheic Lake Maharlou basin.

This paper describes a population from the Alborz Mountains in northern Iran in an endorheic basin. This population is the most northern and eastern one known from Iran and is remote from other populations, although easily accessible. Description of these small, colourful species of tooth-carps is important as they may enter the aquarium trade.

Material

All lengths listed below are standard length; NMC = Canadian Museum of Nature, Ottawa. The specimens on which the description is based are as follows: NMC 93-0124, 5 ♀ 22.2–31.6 mm and 17 ♂ 19.3–27.3, Iran, Semnan Province, Cheshmeh Ali-Damghan (or Cheshmeh-e Ali), 36°17'N, 54°05'E, 6 April 1993, leg. A. ABDOLI.